Sandia National Laboratories

Sandia LabNews

Vol. 49, No. 17 August 29, 1997

Altitude record set in ARM-UAV program

The Altus 2 unmanned aerospace vehicle, built for the Atmospheric Radiation Measurement – Unmanned Aerospace Vehicle (ARM-UAV) program, has reached an all-time record altitude of 43,500 feet during flight demonstrations at Edwards Air Force Base in California.

Carrying a simulated payload of more than 300 pounds, this flight surpassed records of 41,600 feet set a week earlier. This milestone is just another in a series of successes for the Altus program.

Sandia, technical director for the ARM-UAV, which is a DOE global climate change research program, made the announcement in conjunction with General Atomics Aeronautical Systems, Inc., and the Naval Postgraduate School. Host services were provided by NASA through the Dryden Flight Research Center.

The Altus program has completed one deployment in the fall of 1996 in support of the ARM-UAV Program at the DOE Cloud and Radiation Testbed Site in north-central Oklahoma. This deployment consisted of UAV flights to investigate the interaction of clouds and solar energy in the atmosphere, culminating in a record-setting endurance flight of more than 26 hours measuring the heating and cooling of the Earth's surface over a complete day/night cycle.

Altus is being developed as a high-altitude, remotely piloted aircraft for climate research. Controlled from the ground, Altus offers the advantage of long endurance (up to 36 hours) and high altitude (up to 65,000 ft).

The ARM-UAV Program is conducting a month-long series of flights at the Cloud and Radiation Testbed Site in September to take advantage of the increased altitude capability of the Altus 2. These flights will continue research on the effect of atmospheric aerosols, water vapor, and clouds on global climate change.

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truly safe work environment."

Preliminary notices of violation become final in 30 days unless the DOE contractor denies the violations occurred. Sandia does not plan to contest the violation.

In a related announcement, DOE has waived a potential $40,000 civil penalty against Sandia for the December 1996 "scram" incident at the Annular Core Research Reactor (ACRR), citing an effective Sandia response.

"These two actions highlight the philosophy behind the Department of Energy's enforcement program, which is to use nuclear safety rules to encourage safety, not just to punish unsafe behavior," says Tara O'Toole, DOE Assistant Secretary for Environment, Safety, and Health. "The department will forego civil penalties if the contractor takes initiative to find and correct problems. However, we won't hesitate to issue penalties where that response is lacking."

Tom notes that the different approach to these two incidents by DOE demonstrates the importance of not only identifying potential problems but also promptly notifying management so quick action can be taken.

—John German